

PEDIATRICS.

UNDER THE CHARGE OF

LOUIS STARR, M.D., AND THOMPSON S. WESTCOTT, M.D.,
OF PHILADELPHIA.

Citrated Milk for Wasting Infants.—FREDERICK LANGMEAD (*Proced. Royal Soc. Med.*, 1910, iii, 103) reports 80 consecutive cases of wasting infants fed on undiluted citrated milk. Sodium citrate renders the curd in cow's milk more flocculent and soft, thereby overcoming the effect of the ordinarily hard, tough curd. Citration has usually been employed with dilution of the milk. But dilution increases the bulk of the mixture and tends to gastric distention. It also reduces the percentage of fat and sugar to proportions below that of human milk, and the process is complicated for the mother. The 80 cases reported consisted of 41 girls and 39 boys. The age at first attendance varied from three weeks to four months. All the cases were much under weight when first seen and most of them showed gastric and intestinal disturbances. They were all fed on undiluted citrated milk and close account was taken of their weight from time to time. The amount of milk was graded to the child's age. Citrated milk was not used on children under three weeks of age. Two grains of sodium citrate are added to each ounce of the mixture. It is usually dispensed in a watery solution and the requisite quantity added after bringing the milk to a boil. The child is brought back every week to be weighed and inspected. Citration is gradually lessened at about five months and omitted at six months. Its advantages are its simplicity, absence of manipulation, and cheapness. Objections have been raised to the amount of protein in whole milk, but Langmead believes the nature of the curd causes as much trouble as the protein. Constipation was not noticed more than in any other method of feeding. In 150 cases he has not seen oedema or urticaria due to increased coagulability of the blood. When this occurs it is probably due to too large doses. The results in the 80 cases cited were a uniform and often marked increase in weight in all cases, with improved or perfect gastric and intestinal efficiency—which tends to prove the value of this form of feeding for this class of infants.

Enlargement of the Thyroid in Rheumatism.—J. R. CLEMENS (*Archiv Pediat.*, 1910, xxvii, 353), since reporting a series of cases of rheumatism in children accompanied by enlargement of the thyroid gland, has noticed so frequently this condition in rheumatic disease in childhood that he now considers it a sign of rheumatism. Enlarged thyroid may be noticed before, during, or after the course of the disease. The degree of enlargement is not great but is sufficiently pronounced to give unnatural fullness to the neck, especially when viewed laterally. In children with enlarged thyroid glands a careful history should be taken in reference to growing pains, torticollis, and recurrent tonsillitis. There are a few references of the association of exophthalmic goitre with rheumatism.

Human Rickets as an Infectious Disease.—STEPHANO MIRCOLI (*Munch. med. Woch.*, 1910, lvii, 1127) in answer to, a statement describing a diseased condition of the bones morphologically like osteomalacia and induced in rats by a diplococcus, states that in 1891 he isolated and cultivated organisms from the bones and central nervous system of children who had died during the first stages of rickets. These microorganisms belong to the order of physiologically human bacteria, being staphylococci, streptococci, and colon bacilli. Having confirmed these observations experimentally and by histological investigation, he concluded that human rickets is the result of an infection, mostly an auto-infection, from bacteria present physiologically, especially those from the intestinal canal. In 1894 he demonstrated experimentally the staphylococcic autoinfection from the intestine.

Methods of Avoiding and Controlling Epidemics of Poliomyelitis.—PAUL RÖMER and KARL JOSEPH (*Munch. med. Woch.*, 1910, lvii, 945) discuss ways and means of preventing or cutting short epidemics of poliomyelitis. Prophylaxis must cover first the methods by which the virus of the disease is carried or spread. They state that domestic animals or pets, such as dogs, do not come under suspicion as carriers of the infection. It is more probable that the virus is contained in secretions of the nose and mouth and in this way the infection is spread by healthy carriers. Attention is called to the similarity between meningitis and poliomyelitis. Flexner and Lewis showed, experimentally, that the secretions of the nose and mouth in an ape suffering from poliomyelitis were capable of causing the disease, and therefore contained the infective element. It is not improbable, therefore, that the disease in children is spread by carriers with mild constitutional symptoms but with infective secretions, direct contact with these carriers conveying the infection. The virus, even when subjected to a process of drying for days, shows such tenacity and strength that the possibility of the spread of the disease through dried expectoration must be considered. Ordinary disinfectants are inadequate, but experiments on infected rooms show that formaldehyde disinfection killed the virus in seven and a half hours. As regards serum treatment in this disease, Römer and Joseph believe that there are specific antibodies in the serum of animals in which poliomyelitis has been induced, and that a safe and effective method of serum vaccination against the disease is possible. They have proved this possible by experiments on apes, having successfully vaccinated apes with a mixture of this virus and the antiserum. After vaccination these apes were unaffected by injections of the virus, which in the controls not previously vaccinated caused the typical disease and death. They therefore conclude that the serum of apes which have recovered from an attack of poliomyelitis, or have been properly and thoroughly immunized by vaccination, counteracts or destroys the active principle of the virus by long contact within the body. The further proof of specific, obtainable antibodies in poliomyelitis may be expected with surety.

Nursing Infants as Typhoid Carriers.—ROMMELER (*Munch. med. Woch.*, 1910, lvii, 956) states that Koch's campaign against typhoid fever has demonstrated that children and nursing infants are often responsible for the spread of this disease. The investigations of Conadi and others show

that mild and unsuspected typhoid infection in children takes an actual part in spreading the disease from family to family. While small children are not as prone to typhoid as adults, yet the mildness of the course and symptoms of the disease in children makes it hard to take timely and proper precautions against its spread. A young woman who was nursing a child one and a half years old developed typhoid and was removed to a hospital. The child was taken in by a neighboring family who took care of it. It was noticed that the child had a slight diarrhoea and seemed slightly unwell for a short time. Within two weeks the mother of this family developed typhoid. During the next two weeks this woman's three children, her niece who was visiting her, and a servant who lived with the family all developed typhoid, and the servant died from it. As a further proof that the infected baby was the cause of the six cases of typhoid, it was carefully examined with the result that two positive Widal reactions were obtained from its blood and typhoid bacilli were twice isolated from its feces. The child itself had shown only a short, slight indisposition and a mild diarrhoea when it was taken in by this family. Such instances show that unsuspected or undiagnosed typhoid infection in children, and especially in nursing infants is an important factor in the spread of the disease. Rommeler states that when a woman develops typhoid fever while she is nursing an infant, both infant and mother should be sent to a hospital, or the infant be treated with the same careful restrictions as if it had typhoid fever. This plan will prevent the spread of the disease by infants.

OBSTETRICS.

UNDER THE CHARGE OF

EDWARD P. DAVIS, A.M., M.D.,

PROFESSOR OF OBSTETRICS IN THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

The Care of Pregnancy and Labor Complicated by Nervous Overdevelopment.—NEWELL (*Surgery, Gynecology, and Obstetrics*, March, 1910) draws attention to the increasing number of patients who are badly developed, poorly nourished, and by reason of excessive nervous susceptibility are bad cases for parturition. In attempting to care for such in labor, not only must the pelvis be accurately measured, but a careful estimate made of the relative size of mother and child. A second consideration of importance is the estimate of the muscular power of the individual patient and the prompt resort to operative delivery in those women unfit for labor, before exhaustion develops. The nervous resistance of the patient is a most important factor, and may determine the choice of the method of delivery. Many women are overtaxed by the demands of society, or by the effort to attain high scholarship in women's colleges. Another group of patients demanding especial attention are those who have always been sickly and delicate, and whose lives have been preserved by unusual care.

These women are often unfit for parturition. Those patients who develop a lack of accommodation to pregnancy, manifested in the development of toxemia, form a considerable class whose care demands especial consideration. In prophylaxis the effort should be made to limit the overstrain which modern education and society bring upon young women. During pregnancy each case must be studied individually, and at the time of labor such methods adopted as are likely to prove successful. To prevent the nervous shock of labor, anesthetics may be early employed, and in Newell's experience morphine and scopolamine, in graded doses, have given good results. Delivery should be accomplished as soon as possible by appropriate surgical means. It is equally important that such patients be given special care during convalescence. The repair of lacerations, exercises which tend to develop and strengthen the pelvic and abdominal muscles, and rest in bed for three weeks after confinement, are all important. In choosing a method of delivery, if the pregnancy be the first, and the patient has had repeated miscarriages, unusual value may be placed upon the life of the child. If the patient has passed through previous labors and has done badly, the effort must be made to ascertain the reason for the unfavorable result, so as to avoid a second failure. The indication for the elective Cesarean section in competent hands should be extended, and will give the best results for mother and child in many of these cases.

The Treatment of Placenta Prævia.—HAUCH (*Monatsschrift f. Geburts. und Gynäk.*, Band, xxxi, Heft 5, 1910) reports the results of the treatment of placenta prævia in 240 cases in the Copenhagen clinic. Dilatation of the cervix by Bossi's dilator and vaginal Cesarean section were not considered suitable operations for placenta prævia. The classic Cesarean section was not performed for this indication. Among the 240 cases there were 18 or possibly 20 coming within the indications given by Sellheim, Bumm, Küstner, and Pfannenstiel, for extra-peritoneal section. In view of the lack of extensive experience in this operation for placenta prævia, these cases were delivered by other methods.

The examination of the result shows that the 240 cases were observed in 24,000 parturient women, giving a frequency of 1 per cent. Of these, 22 mothers perished, a mortality of 9.1 per cent.; of these patients, 144 were treated by the use of elastic bags, with a mortality of 16, or 11.1 per cent. Among these were 60 cases of central placenta prævia, and 84 cases of partial placenta prævia. Among these patients the elastic bag was placed outside the ovum in 96, with a maternal mortality of 15.6 per cent.; while the bag was placed within the cavity of the ovum in 48, with a mortality of 2.1 per cent.

The Braxton-Hicks method of delivery was employed in 18 cases, with no maternal mortality. Of these, there were 6 cases of central placenta prævia, and 12 of partial. In the whole series the most common cause of death was hemorrhage and exhaustion. Septic infection proved fatal for the mothers in 1.2 per cent. of cases. The mortality of central placenta prævia was 15.3 per cent.; of partial placenta prævia, 5.8 per cent. Of the 144 cases treated by the use of dilating bags, there were 23 primiparæ, with a mortality of 3.6 per cent., and 116 multiparæ,

with a mortality of 5.2 per cent. In these patients there were 235 in whom the ovum was sufficiently developed to be classed as a foetus. The mortality among these was 62 per cent. In cases in which the dilating bag was used without the cavity of the ovum, the foetal mortality was 44 per cent.; and in which the bag was introduced within the cavity of the ovum, the foetal mortality was 52 per cent. In central placenta prævia the foetal mortality rose to 65 per cent., and in partial placenta prævia to 44 per cent.

In cases of infection the origin of this complication could be ascribed, as a rule, to the introduction of the tampon, often before the patient had been brought to hospital. The prolonged use of the bag for four or five hours also predisposes to infection. This danger was greater when the bag was applied outside the cavity of the ovum than when it was introduced within the ovular cavity, and the conclusion is reached that it was unjustifiable for this reason to hasten labor in placenta prævia by the use of the elastic bag. In 11 cases, considerable laceration of the cervix was observed, and among these there were 9 which had been treated by the use of the elastic bag. Lacerations which are not extensive are often overlooked, but as they give rise to hemorrhage and infection they furnish a considerable complication. Wherever the extraction of the child was difficult, laceration was inevitable. It is advised that a bag at least 10 cm. in diameter should be employed for dilatation, so that as complete dilatation as possible may be obtained. The operator is cautioned that if in version and extraction the operation does not proceed readily, he should desist and allow the child to be spontaneously expelled. In 70 per cent. of cases in which the elastic bag was employed a weight was attached to the bag to hasten dilatation. Among these patients there were five severe lacerations of the cervix, with two deaths from hemorrhage. The bag remained in position in these cases between five and six hours on the average. Where a weight was not attached to the bag, lacerations were much less frequent and severe, and the bag remained between three and four hours on the average. In primiparae the use of the bag was prolonged to over six hours, and when a weight was attached to the bag the average duration of its use was seven and nine-tenths hours, while without a weight four and four-tenths hours usually completed dilatation. It is difficult to decide whether the use of the weight could be definitely assigned as the cause for lacerations, but the results were carefully observed, as stated. The operator is urged to be excessively cautious in version and extraction in placenta prævia, and especially after the use of dilating bags. The weight should be attached to the bag only in those cases in which there is considerable hemorrhage or the labor is unduly prolonged. If the interests of the mother alone are to be considered, and especially if the patient cannot be brought to the hospital, the Braxton-Hicks method remains the safest and most applicable.

The Control of Hemorrhage in Placenta Prævia.—KUPFERBERG (*Monatschrift f. Geburts. und Gynäk.*, Band xxxi, Heft 5, 1910) calls attention to the former statistics of the mortality of placenta prævia as 50 per cent. for the mothers, and 90 per cent. for the children. At least one-half of the maternal mortality arose from hemorrhage. Recent

statistics in general practice give a maternal mortality of 20 per cent. for mothers, which is reduced in hospitals to between 5 and 6 per cent., while the mortality for children in private practice, in cases of placenta prævia, is 60 per cent., reduced in hospitals to 20 per cent. The writer refers to 3 cases of death from hemorrhage in placenta prævia in his experience of eighteen years of obstetric practice. All occurred from extensive lacerations of the cervix which could not be controlled by suture and the use of the tampon and other means. He draws attention to the common mistake of proceeding to rapid extraction after turning by the Braxton-Hicks method. The chance of saving the life of the child is so slight, and the increased risk to the mother is so great, that immediate extraction is not justifiable. He has observed lacerations so extensive that bleeding occurred beneath the peritoneum in a region inaccessible to suture from below. Among others, the writer describes the case of a multipara upon whom version and extraction had once been performed because of eclampsia. She suffered at that time from severe laceration of the cervix and perineum. The cervical laceration did not heal, and although the perineum was closed there remained a rectovaginal fistula. Other pregnancies proceeded successfully, but in the forty-first week of the last pregnancy the patient was taken with sudden hemorrhage. On examination there were no labor pains, the cervix permitted the entrance of one finger, the placenta prævia was lateral, and the child in transverse position and viable. The vaginal tampon was immediately applied. After twelve hours there was a renewed severe hemorrhage, with the expulsion of the tampon. The patient was then transported to the hospital, the membranes ruptured, and an elastic bag introduced. Six hours afterward the bag was expelled with repeated hemorrhage and prolapse of the umbilical cord, which pulsated feebly. As the patient desired, if possible, to save the child, the cervix was dilated as completely as possible by bags, and version and extraction performed. The child was born asphyxiated and could not be revived. Very severe hemorrhage followed delivery, complicated by a deep laceration of the cervix upon the right side extending through the vaginal tissue. Although the uterus contracted well, hemorrhage persisted. Momburg's method of compression was tried without result. The laceration was closed by sutures under inspection with the aid of a speculum. The uterus and vagina were tightly packed and compression bandages placed upon the abdomen and perineum. Ergotin and salt solution were given hypodermically. An hour after the application of the tampon the gauze was blood-soaked and the patient in collapse, with a pulse of 150. As a last resort the abdomen was opened and supravaginal amputation of the uterus performed. The patient rallied, recovered without fever, and was discharged in good condition six weeks later. The peritoneal laceration which had been sutured was subsequently repaired. When the patient was discharged there was a firm scar with some contraction of the tissue at the right upper extremity of the vagina. In this case, 500 c.c. of salt solution was used to distend the bag. The child weighed nine pounds. In the literature the writer has collected three cases in which extirpation of the uterus was performed for uncontrollable postpartum hemorrhage. These three cases resulted successfully.

The Importance of Resistance of the Soft Parts during Labor as Influencing Fœtal Mortality and Maternal Mortality.—SEITZ (*Archiv f Gynäk.*, 1910, Band xc, Heft 1) contributes an elaborate paper from Döderlein's clinic in Munich, illustrating this subject. After reviewing the different conditions in which prompt delivery may become necessary, he draws attention to the importance of abnormalities and undue resistance on the part of the soft portions of the genital canal as influencing fœtal mortality and maternal mortality. He draws attention to the value of vaginal hysterotomy as the most efficient method of overcoming these conditions. He also calls attention to the fact that in good hospitals and in competent hands the mother's dangers are not increased by this procedure. In 5036 parturient patients in Döderlein's clinic there were nine deaths from puerperal sepsis, a mortality of 0.17 per cent., and in these are included a number of cases infected before admission to hospital. Of these 9 patients, 2 had abdominal Cesarean section, undertaken in the interests of the child. No mother perished from operation undertaken to overcome abnormalities in the soft portions of the genital canal. Between the years 1900 and 1904, in the Munich clinic, the mortality for five years of parturient women was 0.308 per cent. Since vaginal hysterotomy has been employed the mortality has grown less rather than more. When fœtal mortality is considered, there were 117 fœtal deaths among these cases, of which, 19.7 per cent. could be ascribed to abnormalities in the muscular and elastic tissues. In previous years, the mortality from this condition among the children was 29.4 per cent.; in recent years the mortality of children in contracted pelvis was 9 per cent., while formerly it was 17.3 per cent. It is hoped that the fœtal mortality may be reduced to 1 per cent. by suitable operation. Attention is called to the importance of transferring all complicated cases of labor as soon as possible to suitable hospitals.

GYNECOLOGY.

UNDER THE CHARGE OF

J. WESLEY BOVÉE, M.D.,

PROFESSOR OF GYNECOLOGY IN THE GEORGE WASHINGTON UNIVERSITY, WASHINGTON, D. C.

Actinomycosis of the Uterine Appendages. CARL WAGNER (*Surg., Gyn., and Obst.*, 1910, x, 148) believes actinomycosis of the uterine appendages is practically always a secondary affection from the gastrointestinal tract, perhaps most frequently from the vermiform appendix. The mode of infection is thought to be by infiltration, penetration, continuity, and contiguity. After the acute stage the infected appendage becomes surrounded by dense connective tissue formation, which may lead to erroneous diagnosis of different kinds of tumors of hard consistency. In many cases the gross macroscopic and the microscopic pictures are often mistaken for tuberculous invasion. Wagner says

Bollinger's desideratum for the diagnosis of actinomycosis, namely, that corpora flava must be present, is untenable at the present time. Repeated bacteriological examinations, and sometimes long and tedious ones of the same specimens, must be made, to insure a correct interpretation of suspicious pathological material. Inoculation with pure cultures into the animal is not attended with success. Only the injection of pus with actinomycosis, or the ingestion of material upon which actinomycosis is grown, will prove successful in the production of actinomycosis in the animal. Actinomycosis does not travel by the lymphatics, and probably not by the blood route. The prognosis is favorable in circumscribed cases, which is most likely the condition in which we find the uterine appendages. The treatment consists in radical extirpation and free drainage; the application of tribromphenolbismuth, or irrigation of the fistula with copper sulphate, and the internal administration of large doses of iodide of potassium up to 75 grains a day, which exerts a positive healing effect. A careful study of apparently innocent pus from pelvic disease, as well as secretions from obstinate fistulas after laparotomies from ovarian and tubal pus infections may result in finding actinomycosis more commonly to be the cause of the pathological changes than has been the case heretofore, and in consequence, different treatment inaugurated should insure, perhaps, a higher percentage of final cures.

Primary Cancer of the Fallopian Tube.—DORAN (*Jour. Obst. and Gyn., Brit. Empire*, 1910, xvii, 1) has tabulated 38 cases of primary cancer of the Fallopian tube. Ten of the patients were between forty-five and fifty years of age when the disease was detected; 7 between fifty and fifty-five; 6 between forty and forty-five; and 5 between fifty-five and sixty; 2 had passed their sixtieth year; 3 were between thirty-five and forty; 2 were under thirty, and in 3 the age was not given. Of 100 Doran has collected, the youngest age found recorded was twenty-seven years. From this data it is plain the disease rarely occurs before the menopause, but is most common at or shortly after that period of life of the woman. Nineteen had been one or more times pregnant, 8 were reported as sterile, and in 11 no record was found. In 2, symptoms, principally menorrhagia and vaginal discharge, had existed three years, but usually the symptoms had lasted one to twelve months; pain was present in 25 cases, but in many of these the disease had invaded other structures. In 34 a swelling of some kind was noted, ranging from distinct resistance in a vaginal fornix to an abdominal tumor, but in several there were uterine or ovarian tumors as well. In one, marked ascites was present, and in another to a less degree. In over 27 per cent. of recorded cases of primary cancer of the Fallopian tube free watery vaginal discharge was a marked symptom. Uterine fibroids and ovarian cysts, exclusive of tubo-ovarian cysts, were each present in 4 cases. Doran insists the fimbriated end of the tube closes very early in primary cancer of the tube in contrast to the lateness in benign papiloma of this structure. In 9 there was a distinct history of pelvic inflammation, and in 12 a doubtful one, while in 17 there was no reliable clinical history. In 12 the disease was bilateral, in 10 on the right side only, and in 12 in the left. Two others were unilateral, and in 2 no statement regarding this point was made. Thirty-seven of the patients

were operated upon, but the after histories are so incomplete as to be nearly valueless. Doran states primary cancer of the tube is clearly not a malady of extreme rarity, and that as in at least 27 per cent. of all cases distinct and more or less free watery discharge was present, it is clear that when that symptom is found to be associated with a pelvic or abdominopelvic tumor, that an exploratory operation should be performed, and if a tumor of the tube is detected, the uterus and remaining appendages, as well as the effected tube, should be removed.

Genital Hemorrhages in Cases of Hemophilia.—L. FRÄNKEL and L. BÖHM (*Monats. f. Geb. u. Gyn.*, 1909, xxx, 417) report 7 cases of hemophilia in which uterine hemorrhage was marked. One case proved fatal. In 2 cases there was a family history of hemophilia, and in the other 5 the condition was considered sporadic. The question of hemophilia arises often in cases of menorrhagia and Fränkel and Böhm would accept only such cases as genuine which show an excessive menstrual flow, with intact genitalia, resisting for a long time the usual therapeutic measures, and which have either a family history of hemophilia or a tendency toward severe hemorrhages from other organs. In the literature they find 151 cases of hemophilia in women, 46 of which they consider doubtful. Of the 151 cases a family history of hemophilia was obtained in 99 cases, excluded in 34, and doubtful in 18. They do not find that hemophilia necessarily makes its appearance with the establishment of menstruation, nor that this function is always of grave danger in such women. At least 100 cases of pregnancy complicating hemophilia are recorded. Only once was there hemorrhage before the expulsion of the placenta. In 56 cases the hemorrhage was severe and in 5 fatal. Severe hemorrhages need not necessarily be expected at the time of labor, but there seems to be an increased tendency for hemorrhages late in the puerperium. In general women with hemophilia suffer from uterine hemorrhage, yet as compared with men the prognosis is not made more unfavorable on that account. Fränkel and Böhm advise against marriage, and recommend internal treatment for the condition and local treatment for the uterine hemorrhages, of which firm packing of the uterus and vagina is considered the best.

DERMATOLOGY.

UNDER THE CHARGE OF

LOUIS A. DUHRING, M.D.,

PROFESSOR OF DERMATOLOGY IN THE UNIVERSITY OF PENNSYLVANIA,

AND

MILTON B. HARTZELL, M.D.,

ASSOCIATE IN DERMATOLOGY IN THE UNIVERSITY OF PENNSYLVANIA.

Radium and Radiotherapy in Skin Diseases.—LOUIS WICKHAM, of Paris (*Brit. Jour. Derm.*, November, 1909, p. 357), discussed this subject before the British Medical Association, held at Belfast, the following

being a summary of the article. Radium is employed (1) in glass tubes, which may be introduced into the passages of the body or into growth; or (2) in the form of a varnish, on some metallic base or on linen. The use of filtration by screens composed of aluminum, lead, or other substances has brought about a complete change in the treatment with radium. The quantity of the rays can be modified by employing screens of varying degrees of thickness, and their quality is changed because of the alteration in their penetration. Radium may be applied (1) direct to the surface, when the rays are very numerous, useful in superficial disease (as in lichen patches); and (2) with medium filtration, the rays being less numerous for deeper-seated diseases (as carcinoma cutis); and lastly, (3) with dense filtration, the rays being few in number and very penetrating for deep-seated growths. It is not always necessary to produce inflammatory reaction, because the rays have a specific effect, and if a deep action is called for the application may be prolonged without setting up any surface inflammatory reaction. The radium apparatus may be used in various ways, as by holding it in the hand, by fixing it with pincers, or by employing supports of one kind or another (as a catheter); it may also be used in gray oil and in waters (as washes and baths). Dermatitis (as of the hands) may follow the employment of radium by the operator, precisely as in the case of Röntgen rays. The large and important new field seems to be gradually opening in therapy by this agent.

Treatment of Nevus by Radium.—LEWIS JONES (*Brit. Jour. Dermatology*, November, 1909) states that vascular naevi are favorably influenced by the radiations of radium, thus confirming the experience of other observers. Twenty-four cases were treated in the electrical department of St. Bartholomew's Hospital. The specimen of radium used consisted of 15 mg. of radium bromide with a radio-activity of 500,000, enclosed in an aluminum capsule or button 1 cm. in diameter, giving off a uniform radiation from the entire front surface of the button in any position. The button is fixed on the part to be treated, with a layer of thin gutta-percha tissue interposed. The time was generally one hour. All were small, actively growing, florid naevi in young babies, and all underwent retrogressive changes after the first application of the radium. Usually reaction manifests itself in five days, in the form of redness of the surface, followed very soon by a gradual flattening of the nevus if it has been previously raised; then paleness sets in, with slight desquamation or the formation of a thin, dry scab, which falls off and reforms several times, while the nevus continues to become paler and less defined in outline, finally fading away and the skin assuming a natural appearance, though retaining for some time a faint pink image of the original nevus. No sore or moist surface was observed. The whole process of evolutions requires from four to six weeks. Half the number of cases were completed with a single application; six required a second application.

Radium: Its Therapeutic Value.—W. D. BUTCHER (*Brit. Med. Jour.*, September 12, 1909), well known as a worker in this field, describes its employment for the cure of thickened states of the skin after scarring from rodent ulcer, in lupus vulgaris, carcinoma cutis, nevus, and for the

relief of the itching in pruritus. It is also recommended for the treatment of the lesion of primary syphilis, while it has also proved useful in secondary infiltrations. The author makes use of 10 mg. of radium bromide from Brunswick, said to have a radio-activity of 1,800,000 "uranies."

Treatment of Lupus Vulgaris.—PROF. E. LANG, of Vienna (*Deut. med. Woch.*, October 7, 1909), gives a summary of his labors at the "Lupus-Anstalt," with a record of cure in 262 cases of lupus out of 291 patients examined six months after the end of the treatment. From the year 1892 to date 412 cases were treated. This favorable result is attributed to a combined Finsen light and operative treatment together with general remedies. A note of warning is sounded against the actual cautery and the sharp curette, which leave scars, and thus interfere with the good effects to be derived from the Finsen light. The author believes that the disease may be due to some internal centres of infection as well as from external local causes. [One of us has recently visited this famous Institute in Vienna, and can speak from observation of the excellent work done for the cure of this disease.]

Acute Septic Pemphigus.—JOSEPH GRINDON (*Jour. of Cutaneous Medicine*, October, 1909) gives the notes of a case and considers the subject in its several aspects, especially its relation to other diseases—in particular dermatitis herpetiformis and severe herpes iris in the beginning of the attack, but later all the symptoms, local and general, became aggravated and death occurred in the third month. There was no history of a wound or abrasion to account for a local infection. The whole subject, obscure as it is as to the origin of the infection, is in some instances worthy of further study, as such cases are met with, and, as the author states, acute septic pemphigus has been recorded in a number of cases possessing a well-defined clinical entity. Some of the post-vaccinal cases (as Howe's), and Bowen's cases, and the Pernet-Bullock type of diseases, come under this head.

Cases of Bromide Eruption Mistaken for Blastomycosis.—O. S. ORMSBY (*Jour. Cutan. Dis.*, October, 1909) narrates three cases in which the diagnosis was difficult. The lesions in all three cases were on the legs and were similar, being pustular and papulopustular. The margins were elevated and crusted, surrounded by bluish-red or pale-red areolae, in which there were many miliary pustules. In the early stages the bromide eruption is more actively inflammatory, but later the processes in this respect are very much alike, and on a superficial examination the two diseases are clinically counterparts of each other. It is essential in any case suspected to be one of blastomycosis, in which bromides have been administered, to demonstrate positively the presence of the causative organisms (blastomycetes) before making the diagnosis.

other hand, inflammatory changes do take place, there are present exactly the same factors for producing mischief as exist in the appendix and Meckel's pouch.

Until recent years it was believed that these diverticula are rare. Now, however, they are known to be common, and with this knowledge has come the further knowledge that they are the seat of great potential danger to health and life. In making a systematic search, Graser found 10 cases in 23 autopsies; Sudsuki³ found 15 in 40 autopsies; Stierlin (quoted by Verdenal⁴) found 10 in 38 autopsies. These were all in the lower colon or sigmoid. Baldwin⁵ has found 14 diverticula of the duodenum in a systematic search of 104 cadavers in the anatomical room of the Cornell Medical School. In 81 autopsies done at the Presbyterian Hospital, in New York City, from June, 1909, to February, 1910, 5 cases of sigmoid- and colon-diverticula are recorded, all of a well marked size.

Intestinal diverticula have been found in every portion of the alimentary tract, from the pylorus to the anal ring. The duodenum has furnished a large number (Baldwin); the whole small intestine has shown them; the appendix vermiformis itself has not escaped (Fischer Mertens⁶), and they have been found in large numbers in the colon and the sigmoid. The infection producing ischio-rectal abscess may find its way from the bowel through a diverticulum (Chiari⁷), though the latter is rare in the lower rectum. Apparently the sigmoid is the favorite site for their development. This may be accounted for by the fact that the secondary causes in their production, as elaborated later, are more potent here than in other parts of the bowel.

Their comparative absence in the rectum proper is interesting and is ascribed by Schreiber⁸ to the better musculature in this part. The total number found in one person may run high up in the hundreds. Structurally, they are the same no matter in what portion of the canal they are found, and there is no evidence that the etiological factors differ. In looking for their cause, therefore, we must accept only such conditions as are present along the whole intestinal tract, and such factors as do not conform to this condition must be excluded as primary causes.

A very large proportion of the diverticula of the small intestine occur either between the mesenteric leaves or close to them, (Fig. 1), and this fact led to the belief that there existed an inherent weakness here which was responsible for the hernial protrusion. The colon, however, often shows them placed laterally (Fig. 2). Herczel⁹ and Good¹⁰ showed that bulging of the intestinal wall first took place at the mesenteric border when the dead intestine was subjected to increased

¹ Langenbeck's Archiv, 1900, Lxi, 708.

² Diss., Lyon, 1907.

³ Mitt. a. d. Grenzgeb. d. Med. u. Chir., 1902, ix, 743.

⁴ Deutsch. Arch. f. klin. Med., 1902, Lxxiv, 122.

⁵ Inaug. Diss., Zurich, 1894.

⁶ Personal communication.

⁷ Med. Jahrbücher, 1878, 419.

⁸ Beitr. z. klin. Chir., 1889, v, 600.

Iodine and Exophthalmic Goitre.—TH. KOCKER (*Proc. of 39th Congress of German Surg. Soc., Semaine medicale*, 1910, xxx, 163) draws attention to the effects of iodine upon the body in general and the thyroid gland in particular. Iodine causes a regression of the thyroid gland and a disappearance of goitre, but, on the other hand, symptoms which resemble more closely Basedow's syndrome. The alteration in the blood and characteristic exophthalmus can be produced by large doses of iodine, the symptomatology differing from that of acute iodism. It is a question of iodism of the thyroid gland. The latter stores up iodine and forms with it a compound which will provoke the symptoms of Basedow's disease. Iodine is necessary to the function of the gland, but there are many individuals who are disposed to acquire Basedow's syndrome under the influence of repeated doses of iodine. This predisposition is hereditary or acquired. Many individuals present such symptoms following a simple painting of the skin with iodine.

A Cytoscopic Study of the Cerebrospinal Fluid in General Paresis.—It has been an accepted fact that in all metasyphilitic processes, there occurred a lymphocytosis which has been estimated by counts per cubic millimeter. But STERN (*New York Med. Jour.*, 1910, xci, 909) states this condition is due to degenerated endothelial cells. Undoubtedly, typical lymphocytes do occur, but they are due to a contamination from bleeding into the spinal fluid or blood in the needle during its introduction. The author made a comparative morphological study of both lymphocytes and endothelial cells present in the pleural cavity, and the morphology and degenerative changes in the endothelial cells were the same as in the cells found in the spinal fluid. In no case was he able to find a cell of lymphocytic structure in spinal fluid unless blood contamination was demonstrable either grossly or after centrifugalization. In metasyphilitic diseases, these degenerated endothelial cells were usually present without centrifugalization, while in controls, centrifugalization was necessary to find them. Further study revealed plates as occurs in desquamation and the morphology of the cells was similar. The presence of a subacute leptomeningitis accounts for the desquamation and degeneration and their presence in increased numbers. The previous error he attributes to the low objectives used, $\frac{1}{2}$ and $\frac{1}{4}$ inch, this study having been made with a $\frac{1}{12}$ inch oil immersion. In conclusion, for diagnosis, he feels safe in declaring a case one of general paresis upon the demonstration of a large number of endothelial cells.

Meningococcus Bearers.—S. COSTA (*Comp. rendu. Soc. de biol., Paris*, 1910, lxviii, 776) in studying the etiology and prophylaxis of epidemic cerebrospinal meningitis, made a careful search for chronic bearers in the associates of six cases under observation. Cultures were made from the nasopharyngeal mucus. Colonies which presented the cultural and morphological characteristics of the meningococcus were then submitted to the agglutination test with anti-meningococcic serum. The first case, an officer, was associated with a bearer in the person of his body servant. For the second, a soldier, out of 18 cultures, 2 bearers were found. They had slept side by side with the patient, under the same blankets, in prison, two nights before his admission to the hospital. Five bearers were found in 26 cultures from the associates of the third case. Out of 24 cultures, but 1 bearer was found in the case of the fourth

patient. Among the 8 bearers in the fifth case, two were neighbors of the patient and one had lost his wife from the disease a month previously. Among the 7 bearers in the sixth case, two were musicians like himself and lived intimately with him.

Experimental Typhoid Fever.—METCHNIKOFF and BESREDKA (*Semaine médicale*, 1910, xxv, 166) have been able to reproduce in a chimpanzee a febrile disease similar to human typhoid fever by feeding the animal fecal material taken from a typhoid patient at the Pasteur Hospital. This fecal material gave a pure culture of *Bacillus typhosus*. Seven days after the beginning of the experiment, the temperature rose to 40.5° but was 38° four days later. At the height, *Bacillus typhosus* was recovered by blood culture. A dysentery followed, to which the animal succumbed on the thirteenth day. The dysenteric stools also yielded the specific bacillus. At autopsy, there were hemorrhagic erosions of the mucous membrane of the large intestine, but in the ileum the Peyer's patches were considerably hypertrophied, corresponding to those in early typhoid fever in man. The retrocecal glands were congested and enlarged, and contained foci of necrosis. In a word, their experience with the chimpanzee shows that the ingestion of fecal material of man rich in typhoid bacilli is capable of producing typhoid fever comparable to the human disease.

Typhoid Bacteriology.—STOKES and STONER (*Jour. Infectious Dis.*, 1910, vii, 457) have collected the statistics of the literature in regard to the bacteriology of typhoid fever. In the urine of 622 typhoid patients during the attack, the cultures were positive in 45 cases, or 7 per cent. These cases were in series reported by Thomas, Hiss, Petruschky, Richardson, Horton-Smith, Blumer, Müller, and Graf. In 744 cases, during convalescence, the bacilli were found in 45 cases, or 6 per cent. Paratyphoid bacilli were recovered from the urine in 4 per cent. of 259 cases during the attack, and 3 per cent. of 92 cases in convalescence. In the stools, the positive cases amounted to only 20 per cent. out of 5844 patients. Twenty-five per cent. of these were present in the second week, 20 per cent. in the third, 16 per cent. in the first, and 10 per cent. in the fourth. Of 703 cases in convalescence, only 2 per cent. were positive. In 954 cases of paratyphoid infection, 5 per cent. of the stools yielded the bacillus during the attack, and 3.5 per cent. of 31 cases in convalescence; 2359 blood cultures yielded the typhoid bacillus in 1625 instances, or 68 per cent. In the first week, the positive cultures were 78 per cent., 69 per cent. in the second, 57 per cent. in the third, 32 per cent. in the fourth, and 25 per cent. after the fourth week. The authors report two instances of isolation of *Bacillus pyocyaneus* from the circulating blood on the fourth day of a typhoid-like attack. They have been able to find only seven other cases in the literature.

Notice to Contributors.—All communications intended for insertion in the Original Department of this JOURNAL are received only with the distinct understanding that they are contributed exclusively to this JOURNAL.

Contributions from abroad written in a foreign language, if on examination they are found desirable for this JOURNAL, will be translated at its expense.

A limited number of reprints in pamphlet form, if desired, will be furnished to authors, provided the request for them be written on the manuscript.

All communications should be addressed to—

DR. A. O. J. KELLY, 1911 Pine Street, Philadelphia, U. S. A.